

CLAIMS

1. An insert comprising a supporting portion for supporting an external terminal face of an area array type electronic component so that external terminals of the area array type electronic component are exposed to the direction of connection terminals of a socket, wherein

a thickness of the supporting portion is approximately equal to or less than a distance between a contact portion of the external terminals of the area array type electronic component and the external terminal face of the area array type electronic component, and

the supporting portion is provided to be positioned between the external terminal face of the area array type electronic component and the connection terminal face of the socket when the external terminals of the area array type electronic component and the connection terminals of the socket are connected.

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2. The insert as set forth in claim 1, wherein the supporting portion is configured by a thin plate.

3. The insert as set forth in claim 1 or 2, wherein a plate member comprising the supporting portion

is provided to the insert so as to face the connection terminal face of the socket.

4. The insert as set forth in claim 3, wherein a supporting portion part or whole of the plate member is configured by a thin plate.

5. The insert as set forth in claim 3 or 4, wherein the plate member has an opening portion for exposing the external terminals of the area array type electronic component to the direction of the connection terminals of the socket, and can support the external terminal face of the area array type electronic component by a rim of the opening portion.

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6. The insert as set forth in claim 5, wherein the rim of the opening portion of the plate member is configured by a thin plate.

20 7. The insert as set forth in any one of claims 3 to 6, wherein the plate member is attached to an insert body as a separate member from the insert body.

8. The insert as set forth in any one of claims 3 to 7, wherein the plate member is configured by a metal

plate.

9. The insert as set forth in any one of claims
1 to 8, being attached to a tray for carrying an
5 electronic component to be tested to and from a contact
portion of a test head of an electronic component testing
apparatus.

10. An electronic component handling apparatus
10 for conducting a test on an area array type electronic
component by connecting external terminals of the area
array type electronic component with connection terminals
of a socket in a state of holding the area array type
electronic component in an insert, comprising the insert
15 as set forth in any one of claims 1 to 9.

11. The electronic component handling apparatus
as set forth in claim 10, wherein the socket is a sheet
shaped socket.

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12. An electronic component testing method for
conducting a test on an area array type electronic
component, comprising

supporting an external terminal face of the area
25 array type electronic component by a rim of an opening

portion of a plate member having the opening portion,

pressing the area array type electronic component
in the direction of connection terminals of a socket in a
state that external terminals of the area array type

5 electronic component are exposed from the opening portion
to the direction of the connection terminals of the
socket, and

connecting the external terminals of the area array
type electronic component with the connection terminals

10 of the socket,

wherein

a thickness of the rim of the opening portion
of the plate member is approximately equal to or less
than a distance between a contact portion of the external
15 terminals of the area array type electronic component and
the external terminal face of the area array type
electronic component, and

the plate member is positioned between the
external terminal face of the area array type electronic
20 component and the connection terminal face of the socket
when the external terminals of the area array type
electronic component and the connection terminals of the
socket are connected.